

Date: Tuesday, 24/03/2009 1:12:14 PM  
User: Julie Dawson

## Process Sheet

<b>Customer</b>	: CC-DAR01 Dart Aerospace Ltd.	<b>Drawing Name</b>	: GLARESHIELD ASSEMBLY
<b>Job Number</b>	: 46677		
<b>Estimate Number</b>	: 13291		
<b>P.O. Number</b>	:	<b>Part Number</b>	: D3690041
<b>This Issue</b>	: 24/03/2009	<b>S.O. No.</b>	:
<b>Prsht Rev.</b>	: NC	<b>Drawing Number</b>	: D3690 REVC
<b>First Issue</b>	: / /	<b>Project Number</b>	:
<b>Previous Run</b>	: 41937	<b>Drawing Revision</b>	: C
	<b>Type</b> : SMALL /MED FAB	<b>Material</b>	:
<b>Written By</b>	:	<b>Due Date</b>	: 31/03/2009
<b>Checked &amp; Approved By</b>	: <u>JUD 09.03.24</u>	<b>Qty:</b>	6
<b>Comment</b>	: Est Rev:A 08-04-29 new issue DD verified by:ec	<b>Um:</b>	Each
	Est Rev:B 08-07-14 revB as per dwg DD verified by:ec		
	Est Rev:C 08-09-08 added painting DD verified by:EC		
	Est Rev:D 08-10-07 revC as per dwg DD verified by:EC		

## Additional Product

Job Number:



Seq. #: Machine Or Operation:

Description :

1.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

2.0

D36901

Glareshield



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Glareshield

batch: B45301

FF 09-03-25 (6)

3.0

D3697041

Tube Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Tube Assembly

batch: B41223

FF 09-03-25 (6)

4.0

D36981

Support Angle



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

Support Angle

batch: 46604

FF 09-03-30 (6)

5.0

AN960JD3

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Washer

batch: 107989

FF 09-03-25 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Tuesday, 24/03/2009 1:12:15 PM  
User: Julie Dawson

## Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GLARESHIELD ASSEMBLY

Job Number: 46677

Part Number: D3690041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

MS20426AD35

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 12.0000 Each(s)

RIVET

batch: 174179

FF 09-03-25 (6)

7.0

CR3213403

rivet



Comment: Qty.: 35.0000 Each(s)/Unit Total: 210.0000 Each(s)

rivet

batch: 14477 <sup>156</sup> ~~26~~ / 16896 <sup>54</sup>

FF 09-03-25 (6)

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

FF 09-03-25 6

1- transfer drill D3697-041 and D3698-1 in D3690-1 and assemble as per dwg D3690

2- scribe bath # and part # as per dwg

FF 09-03-30 (6)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 09/03/31 (10)

10.0

SPRAY PAINTING

SPRAY PAINTING



Comment: 1- Mask hatched areas (6 pls) on inside of the part prior to painting as per dwg

2-Paint D3690-041 assy flat black using Basf Glasurit 22 Line code SFA39.50 per Dart QSI 005 4.2

FF 09-04-02

11.0

QC14

INSPECT SPRAY PAINT



Comment: INSPECT SPRAY PAINT

FF 09-04-02 (6)

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with Dart part # and batch # using a fine point permanent marker on inside of part and Stock

Location: On top 191

(CX)  
Sep

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3690-041 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: D Date: 09/04/06

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: 46677		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/3/31	8.1	Dulling inspection found on two parts that Rivets need to be changed	BS/WH	Drill out affected Rivets * Carefully *	FF 09/03/31	S 9/3/31	BS/WH	S 9/3/31
		one part has two Rivet installed <del>correct</del>		inspect holes after Dulling * as only	n/a	S 9/3/31		
		one part has one Rivet with the head <del>broken</del> broken off. → Did not break off, it was a C'sunk rivet installed	BS/WH	Reinstall Rivets. CR323408 M 16896	FF 09/03/31	S 9/3/31	BS/WH	S 9/3/31
		R.C. <del>process</del> process.						

NOTE: Date & initial all entries

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## Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: GLARESHIELD ASSEMBLY

Job Number: 46677

Part Number: D3690041

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

QC21

FINAL INSPECTION/W/O RELEASE



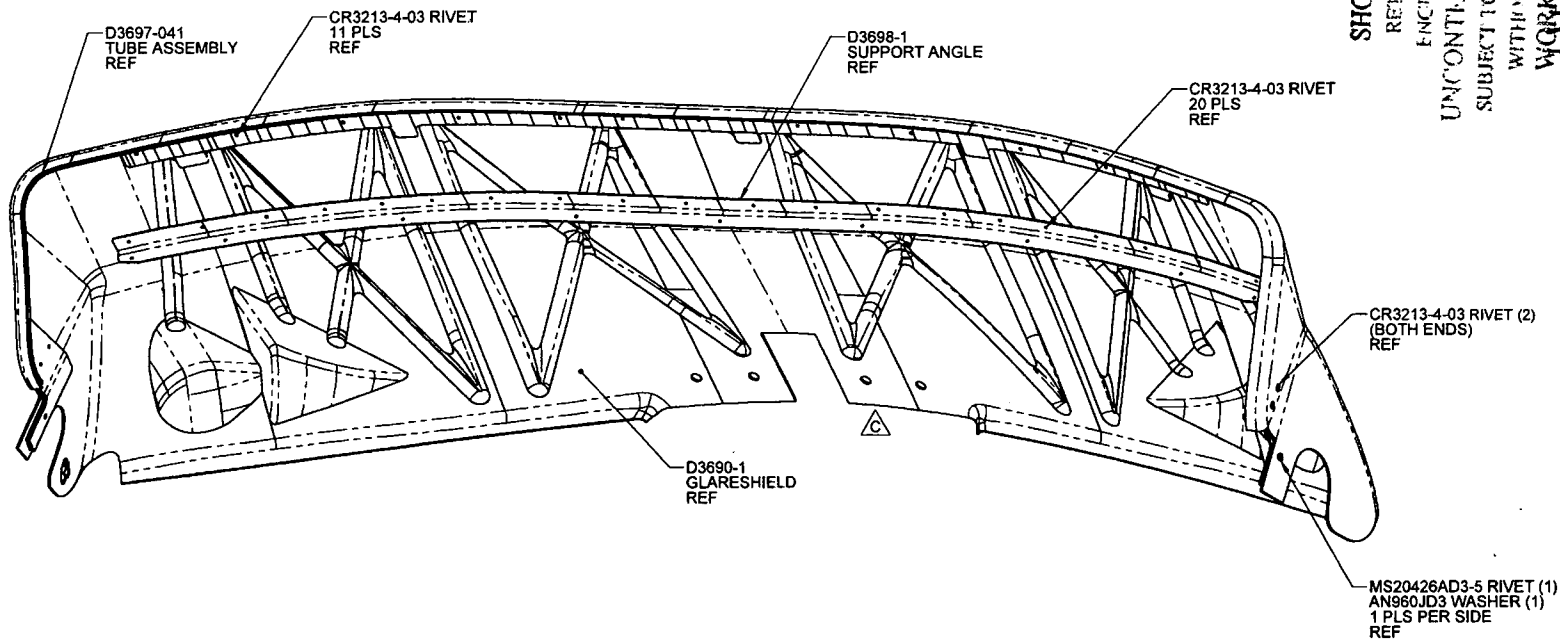
09/04/06 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



*MF*  
09-04-06



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WORK ORDER  
NO. 110000

RELEASED  
28-09-16/17

PART LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3690-041	GLARESHIELD ASSEMBLY
1	D3690-1	GLARESHIELD
1	D3697-041	TUBE ASSEMBLY
1	D3698-1	SUPPORT ANGLE
2	AN960JD3	WASHER (OR NAS1149DN332J)
2	MS20426AD3-5	RIVET
35	CR3213-4-03	RIVET

D3690-041 GLARESHIELD ASSEMBLY

SHEET 1 PL MS20426AD3-5 RIVET WAS MS20426AD3-4, CR3213-4-03 RIVET WAS MS20470AD3-4, WASHER QTY WAS 6 (VIEWS UPDATED ACCORDINGLY). RIVETS ON SHEET 1 CHANGED TO REF QTY. RIVETS ON SHEET 2 CHANGED TO "HARD" CALLOUTS. SHADING REMOVED FROM ALL VIEWS FOR CLARITY.		AJS	08.09.02
B ADD FINISH COAT & 1.0 TYP. SHEET 2 ZONES A, B & C, 5: ADD MIN THICKNESS. SHEET 3 ZONE A, B		RF	08.06.24
A NEW ISSUE		RF	08.05.26
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D3690</b> REV. C TITLE <b>GLARESHIELD ASSEMBLY</b> SCALE <b>NTS</b>	
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF	DATE <b>08.09.02</b>	

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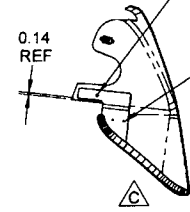
8 7 6 5 4 3 2 1

△ TRANSFER DRILL Ø0.128  
FROM D3698-1 TO D3690-1  
INSTALL  
CR3213-4-03 RIVET, 20 PL  
RIVET HEAD ON GLARESHIELD  
OUTSIDE SURFACE

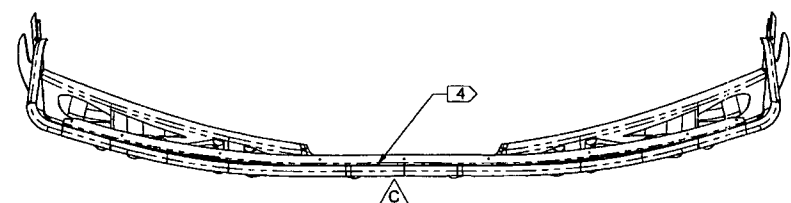
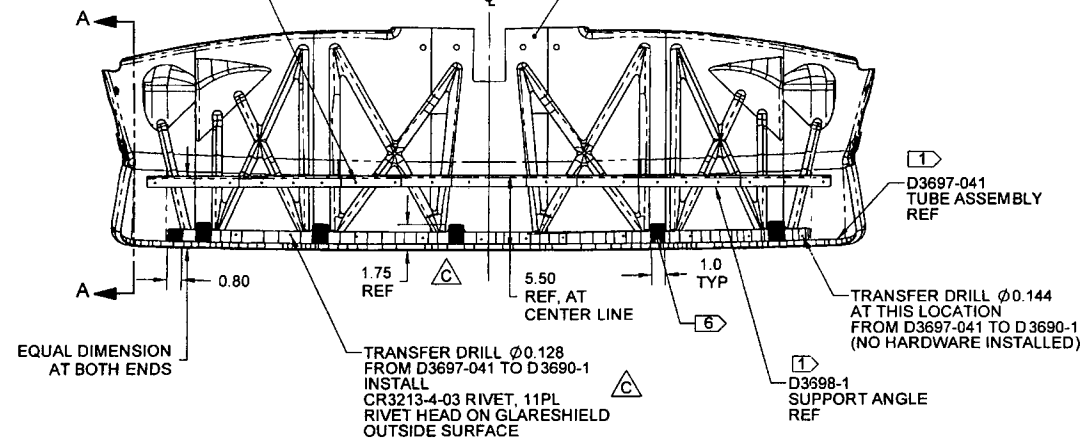
D3690-1  
GLARESHIELD  
REF

TRANSFER DRILL Ø0.098  
FROM D3697-041 TO D3690-1  
INSTALL  
MS20426AD3-5 RIVET  
AN960JD3 WASHER (ON GLARESHIELD  
OUTSIDE SURFACE)  
1 PER SIDE

TRANSFER DRILL Ø0.128  
FROM D3697-041 TO D3690-1  
INSTALL  
CR3213-4-03 RIVET 2  
BOTH ENDS



**SECTION A-A**



**D3690-041 GLARESHIELD ASSEMBLY**

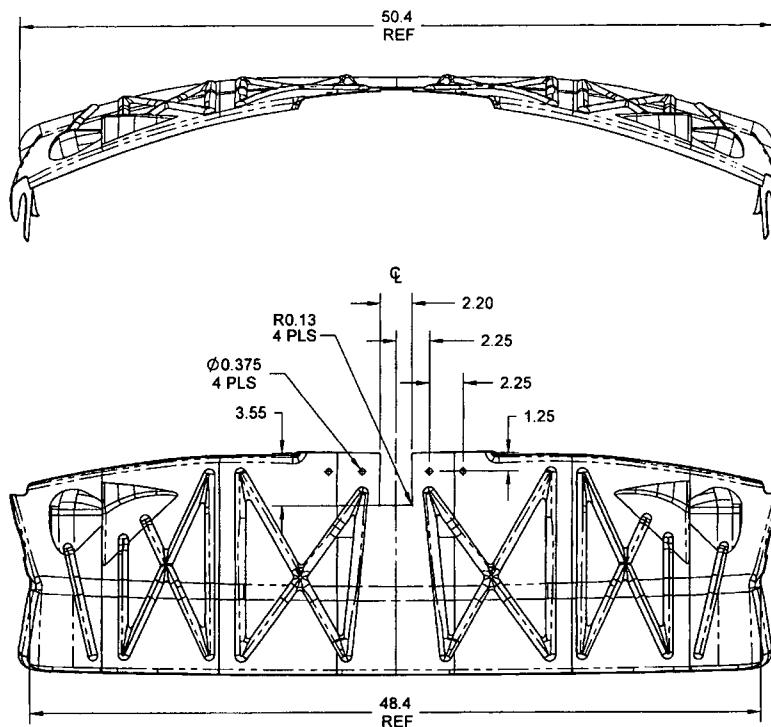
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WORK ORDER  
NO. 11111

**RELEASED**  
08-09-02

- NOTES:**
- 1) CENTER D3697-041 AND D3698-1 ON TO D3690-1
  - 2) FINISH: PAINT D3690-041 ASSY FLAT BLACK USING BASF GLASURIT 22 LINE CODE SFA39.50 PER DART QSI 005 4.2
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) IDENTIFICATION: ETCH WITH DART P/N D3690-041 & B/N ON INSIDE OF PART
  - 5) WEIGHT: 2.98 lbs
  - 6) MASK HATCHED AREAS (6 PLS) ON INSIDE OF THE PART PRIOR TO PAINTING

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO. <b>D3690</b>	REV. C
MFG. APPR.		SHEET 2 OF 3	
APPROVED		TITLE <b>GLARESHIELD ASSEMBLY</b>	SCALE NTS
DE APPR.		COPYRIGHT © 2008 BY DART AEROSPACE LTD.	
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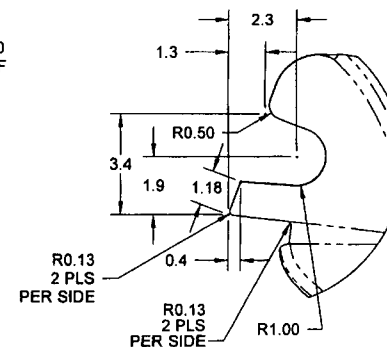
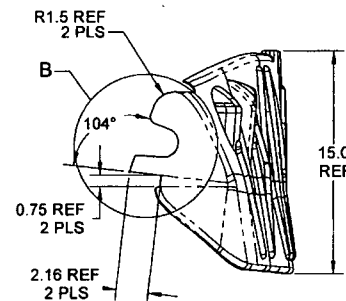
8 7 6 5 4 3 2 1



**D3690-1 GLARESHIELD**

**NOTES:**

- 1) MATERIAL: F6006 SUEDE/POLISHED 701 BLACK FLAT LEXAN SHEET 0.093 THICK  
(REF DART SPEC MLEXS.093-F6006-02)
- 2) TOOLING: THERMOFORM PER MOLD DT9010 PER QSI 022  
TRIM PER MOLD SCRIBE LINES EXCEPT WHERE NOTED
- 3) FINISH: NONE
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 2.5 lbs
- 9) MINIMUM THICKNESS AFTER FORMING IS 0.040



**RELEASED**  
07-07-14 110

**DETAILS**  
SCALE 2X  
THIS VIEW FOR REFERENCE ONLY

DESIGN	RF	<b>DART AEROSPACE LTD</b>	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		<b>D3690</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>GLARESHIELD ASSEMBLY</b>	NTS
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